Increased storage, connectivity options and networking bandwidth enable organizations to provision web resources and deliver information content closer to the user. However, to achieve this goal, organizations are forced to expose more and more content on the Internet, causing a higher level of sensitive and confidential information leaks, which can lead to serious economic impacts and loss of trust.

Most common information leaks occur through unseen channels such as metadata and unseen document information. As described by the Reconnaissance phase of the Cyber Attack Kill Chain, this metadata information could be used by the attackers to learn more about their targets, and to carry out cyber-compromising activities, such as a social engineering attack (e.g. ransomware or spear-phishing), because metadata could provide useful information about the employees and the company’s IT infrastructure. Knowing the software and versions in use within the organization (thanks to the information disclosed in metadata) can determine which exploits would be likely to succeed in a phishing attack.

Moreover, businesses and organizations are subject to compliance with regulations regarding the security and protection of personal information, such as the upcoming new General Data Protection Regulation (GDPR). Even metadata with no obvious identifier is considered under the GDPR’s definition of personal data, and therefore they will need to prevent data breaches and leaks of sensitive information resulting from metadata.

ElevenPaths, Telefónica Cyber Security Unit, and Fortinet recently established a technology partnership to help organizations prevent and detect the leakage of sensitive information resulting from metadata.

**Solution Description**

The solution features ElevenPaths’ Metashield for ICAP integrated with Fortinet’s FortiGate enterprise firewall, and ensures that web files are properly processed, free of sensitive or confidential information that may pose a risk of leaks due to their metadata and hidden information.

Metashield for ICAP provides the constant and real-time protection needed to protect the integrity of confidential information contained as metadata in all documents and multimedia files provided under web requests, while maintaining the integrity of the internal files. Metashield is a flexible product with great operational capacity, perfect for its implementation in your organization’s preventive structure integrated with your FortiGate enterprise firewall solution through the ICAP protocol, and prevents the disclosure of sensitive or confidential information.

Fortinet’s award-winning FortiGate enterprise firewall platform delivers the highest levels of network security protection with unparalleled performance. FortiGate mitigates exposure to network threats while using the Fortinet security processing architecture to enable heavy content-processing features, such as SSL inspection without compromising network.
or application performance. The Fortinet Security Fabric uses a collaborative approach based on interoperability and is achieved by adopting industry standards such as RFC 3507. The Fortinet Security Fabric’s integrated, collaborative and adaptive architecture delivers broad, powerful and automated security without compromise to address security needs.

By integrating ElevenPaths’ Metashield for ICAP with Fortinet’s FortiGate enterprise firewall, customers can easily implement homogeneous corporate policies to prevent and detect leaks of sensitive information, and reduce the economic and reputational impact resulting from the malicious use of exposed metadata.

The combined solution involving Metashield for ICAP and FortiGate is realized through the Respmod mode of the ICAP protocol, and creates the perfect secure environment for the web service, and is completely transparent to users.

The functioning of the joint solution is summarized in the illustration below.

Metashield for ICAP operates on a Windows Server environment, receiving all files from the ICAP Client (FortiGate) that must be served, processing them, and then returning them to FortiGate for final delivery to the requesting user.

This innovative joint solution involving Telefónica and Fortinet products working in synergy provides differentiated value, and delivers security without compromise.

### About ElevenPaths

At ElevenPaths, Telefónica Cyber Security Unit, we believe in the idea of challenging the current state of security, an attribute that must always be present in technology. We’re always redefining the relationship between security and people, with the aim of creating innovative security products which can transform the concept of security, thus keeping us one step ahead of attackers, who are increasingly present in our digital life.

Learn more at [https://www.elevenpaths.com](https://www.elevenpaths.com)